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Chair

Mr. James Maloney

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● (0855)

[*English*]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Good morning to our witnesses: Ethan Zindler, Head of Americas, Bloomberg New Energy Finance; Maike Luiken, President, IEEE Canada; and Zoltan Stojanovic, Director, Information Systems, London Hydro, IEEE Canada.

Thank you all for joining us today. We're starting a little late, so we appreciate your patience.

The process for the morning is each group will be given up to 10 minutes for their presentation. Then we open the floor to questions from around the table. You are welcome to deliver your remarks or answer questions in French or English. It's not unusual to be asked questions in French as well. We have devices available to you should you need them for translation.

I will open the floor.

Mr. Zindler, do you want to start us off?

Mr. Ethan Zindler (Head of Americas, Bloomberg New Energy Finance): Thank you very much for the opportunity.

If at any time you can't hear me, just let me know.

I'm happy to join you here from Washington, where we're hoping by the end of the day we will hoist our first ever Stanley Cup. Not to rub it in, but we've very excited to be in the finals this year.

I'm very pleased to be joining you today to talk about this important topic. My name is Ethan Zindler, and I head research and commercial operations for Bloomberg New Energy Finance in the Americas.

Bloomberg New Energy Finance, BNEF, is a division of the financial information provider Bloomberg Finance L.P. Our group provides major investors, utilities, policy-makers, and others with data and insights on new energy technologies. These include renewables, such as wind and solar; electric vehicles; energy efficiency technologies; power storage systems, such as batteries; and natural gas, among others.

My remarks today represent my views alone, not the corporate positions of Bloomberg Finance L.P., and of course they do not represent specific investment advice. Sorry; that's language I have to include for our lawyers.

The topic of today's hearing, the importance of energy data, is at first blush a potentially rather dry one. I know most normal people probably regard the words "data" and "passion" to be fundamentally antithetical to one another, but we at BNEF and Bloomberg L.P. are deeply passionate about the value of data and its importance in guiding effective business policy and other decisions. As our founder, Michael Bloomberg, has often said, "In God we trust, but all others must bring data."

I will talk in a moment about Canada and the level of data transparency there and its energy markets in just a second, but first I'd like to tell you a bit more about my firm, BNEF—not to be self-indulgent, but because I think our firm's journey over the last 14 years is in itself emblematic of the value of energy data.

BNEF was founded in 2004 as a start-up then known as New Energy Finance. The company was the brainchild of a former management consultant who was keen to invest in renewable energy companies. Very quickly he realized that there was almost no truly useful business data on the state of these types of firms or even on wind, solar, or other clean energy technologies. This included a lack of information about their costs, their deployment, which companies were involved with them, etc.

When I joined what was then a 30-person company in 2006, our informal goal was to maintain what we thought would be the Saudi Arabia of clean energy data. That involved each of us keying thousands of data records into a database, to which we then sold access to clients who had interest in those technologies. Over five years we built a small but ardent user base of utilities, equipment makers, policy-makers, and others, all of whom were seeking timely and accurate data on these potentially revolutionary new technologies.

Eventually, several large information service companies became interested in what we were doing and in 2009 we sold the firm to Bloomberg L.P. Our founder, who started the firm out of a small London garden apartment, today splits his time between his townhouse in Notting Hill and his chalet in Switzerland. I offer this anecdote not because it has a happy ending, but because it demonstrates the value of information in a vacuum and how very quickly the market can come to value and to recognize it.

There may be no industry in which data and transparency are more important than energy, given the fundamental role it plays in the lives of literally every one of us. Today, even on the most micro level, we are seeing greater transparency in how energy is produced, delivered, and consumed.

Consider, for instance, the proliferation of smart thermostats such as those produced by companies like Nest and others. These devices allow consumers to adjust their thermostats when away from home, understand their consumption patterns down to the minute, and make adjustments accordingly. Businesses large and small today are taking advantage of similar technologies to improve energy storage in their warehouses, retail outlets, and supply chains.

All of this brings me to Canada, which is one of the world's premier energy producers and exporters, but, at least in our view, not truly a world leader when it comes to energy data transparency.

Our team of analysts at BNEF regularly write research pieces about business and policy developments in the Canadian energy market. We've been honoured to host Minister Carr and Minister McKenna at our annual conferences, and our research is regularly read by the staff at NRCan, Sustainable Development Technology Canada, and other federal agencies there.

● (0900)

We produce long-term 20-year outlooks projecting how the Canadian power sector will evolve in the face of unprecedented technological development. We attempt to predict the number of electric vehicles Canadians will buy over the next two decades, among other things.

We are deeply interested in what is happening in Canada, both because it represents a dynamic and intriguing domestic power market and because the country's exports of oil, gas, and uranium, among other commodities, give it a real influence over certain global markets. However, we regularly find it challenging to find timely, consistent, and entirely accurate data on the state of play for energy across the nation. Specifically, there are insufficient datasets collected and made easily available at the federal level, particularly on the power sector. Those datasets that are collected are often too high-level and are updated too infrequently for those seeking a nuanced understanding of the market.

Furthermore, our analysts tell me that the figures reported at the federal level are, with some frequency, inconsistent with those produced by the provinces.

To give one rather specific example, our team this past year has sought to update our short- and long-term outlook for the Canadian power sector. Among other things, we sought out a single comprehensive look at all the country's power plants, including the plant name; the primary fuel that each one was burning; the operational date of each one; the planned retirement date, if it had been disclosed; its annual power generation; and how much CO2 each plant emitted. As well as we could tell, there exists no single repository for this information today.

Beyond making life easier for energy wonks like me and those on my team, why is it so important for Canada to better organize and provide its data? Consider the example I mentioned a moment ago, but from the perspective of an energy project developer, either a small local player or a large multinational looking for strategic opportunities in Canada. Surely such a developer would want to understand where the oldest or otherwise least economical existing power plants are today, as these are the plants that stand to be replaced by newer generations.

In the same vein, companies now looking to deploy large-scale batteries onto the grid to address reliability are keen to know where certain pinch points exist as well. It's worth noting that provincial governments around Canada do publish energy statistics. Some of these datasets are robust, reliable, and very helpful. However, there is little consistency in the format of how those datasets are produced, and collating them can be a big headache.

In terms of addressing this issue, I would simply note that other nations have established regimented protocols for the collection and dissemination of data. There's also the International Energy Agency, which compiles key datasets on international activity.

I am joining you from Washington today, as you know, and I do not often hold up my own government as a paragon of data transparency, but when it comes to energy data, I will argue that the U.S. Energy Information Administration does a really admirable job of collecting key information and making it very easily consumable for market players. I would also note that this is really EIA's only job. It's not a regulatory or enforcement party. EIA certainly has its detractors in the United States. Renewable energy proponents in particular have long complained about its forecasts being inaccurate, but EIA has very rarely been accused of having any kind of partisan bias. Given the extraordinarily contentious climate here in Washington today, that really is saying something.

I would posit that the reason EIA is regarded as being so independent is that it holds no regulatory power itself. Those tasks are left to other federal offices. Having this division between government and data collector and government policy implementer strikes me as very wise.

I'd like to conclude my comments simply by reiterating that investors and businesses of all stripes crave data transparency. Those in the energy field are simply no different. Furthermore, the expectations are higher than ever, given the technologies currently available to collect such data and the plethora of data that's all around us now, so it's understandable that on these issues many expect just a bit more clarity from Canada as one of the world's leading energy producers and exporters.

Again, I would like to say thank you to the committee for giving me this opportunity today, and I look forward to your questions.

● (0905)

The Chair: Thank you, Mr. Zindler.

I was actually cheering for Las Vegas, but you're so persuasive that I think I might cheer for Washington tonight.

Ms. Luiken, we'll go over to you.

Ms. Maike Luiken (President, IEEE Canada): Are the questions at the end for everybody?

The Chair: Yes.

Ms. Maike Luiken: Thank you very much.

I'm Maike Luiken from IEEE Canada. It's a pleasure and honour to have a first opportunity to address this standing committee of the House of Commons.

I'll say a couple of words about IEEE and IEEE Canada.

IEEE is the world's largest technical professional organization, with 400,000 members around the world. Its byline is "advancing technology for the benefit of humanity".

We all use IEEE, because I assume you all use Wi-Fi. Wi-Fi is an IEEE standard.

In Canada, we have more than 16,000 members. The IEEE Canada organization is a member of the Engineering Institute of Canada and a member of PAGSE, which delivers the Bacon and Eggheads breakfasts on Parliament Hill, which you might be aware of. We work with other organizations, such as the Canadian Standards Association, or CSA.

In the organization, there is significant strength of expertise in the areas of electrical power and energy, communications and data science, and in artificial intelligence. That may be of use to this committee and other committees as the need arises.

With respect to national energy data, energy-related data is being collected across the country by various stakeholders, as we heard before, for a variety of applications and purposes, although not necessarily in a standard format, and there are definite gaps. This includes data on available energy resources and their extraction technologies; energy transport, energy infrastructure, and energy carriers; energy storage; energy users—essentially private industry, business, and public sectors, and all end-user consumers for all types of energy use, from electricity to gas to coal—and energy consumption patterns; energy conservation technologies and their impact; building infrastructure inventory, which is lacking quite a bit; greenhouse gas emissions; weather patterns; population changes; cybersecurity, which is another area where we lack significantly in data; and industry trends. That's just to name a few of the areas in which we collect data by one agency or another in the country.

For the future of national energy data, it's absolutely critical that we have nationally consistent energy data to plan, develop, and provide reliable services. The requirement for the future national energy data is that the data be, among other things, sufficient, trusted, reliable, current, secure, and sufficiently accurate. Data analytics applied to these data will support, among other things, evidence-based decision-making, policy development, and system optimization and planning. Of course, this data will then enable research and development.

The requirements are that we determine what data we actually need and what data is desirable, and how that data may be obtained and protected. We need to audit the data that we collect. We need to determine the data gaps and augment the datasets to address the gaps. We need to look at the data integration from many sources, using a standard like the Green Button standard, which my colleague will report on later. We need consistent access, with different access levels of security for all stakeholders through a trusted independent agency. The data has to be current, and it has to be compliant, for example, with the GDPR, the General Data Protection Regulation. We have to have a transparency of process and system, and we need to use the established practices of big data.

Some of the members of IEEE Canada are focusing on underserved communities, particularly northern and indigenous communities, to bring technology-based solutions to improving the living and working conditions there. This would mean that robust location-specific data, as well as technology performance data, are expected to enable optimal holistic solutions, considering heating, lighting, internet access, potable water, wastewater treatment, and transportation as a system of systems.

● (0910)

In other words, datasets across these various disciplines, these various areas, taken together with a transparent access would allow us to support such policies as a dig-once policy and essentially deliver holistic solutions.

Today, that's very difficult. Some of my colleagues report to me that when they're trying to do energy systems research and development, they don't have, or have very little, access to data. Even the data from the EIA is hard to obtain for research.

I offer, at the end, a positive note. IEEE has started to address the issue of large datasets and accessibility to large datasets by opening up a service that's called IEEE DataPort. The standard use is free for use today. It is essentially an accessible repository of datasets, including big datasets. It's designed to store datasets, to provide access to facilitate the analysis of datasets, and to retain reference-able data for reproducible research. It's essentially a service that the Government of Canada, for example, could use to deposit the anonymized datasets for research purposes and public access.

With that, I'd like to turn it over to Zoran.

Thank you very much.

Mr. Zoran Stojanovic (Director, Information Systems, London Hydro, IEEE Canada): Good morning. Thank you for the opportunity to present this morning. My name is Zoran Stojanovic, and I'm Director of Information Services at London Hydro.

I want to thank you for an amazingly good introduction to the topic I'm going to talk about, and that's data transparency and how we can help our customers.

I'm going to bring the view of what data transparency means to our consumers and our customers—especially our commercial customers, who really need this data to make efficiencies and save on costs.

The fact is that North American utilities daily store a variety of data that are utilized for grid monitoring, bill production, customer engagement, education programs, and so on. Typically this data among utilities is stored in isolated databases such as their operational data stores, and it's not easily shared. It's not transparent to all the ecosystem, which includes customers, government organizations, and research organizations.

The fact is that a wealth of data exists, and it's growing among utilities. However, challenges remain for effective sharing, authorization, and utilization of this data, of this tremendous resource, on a consolidated cross-utility level.

Take Ontario, where we have just over 60 utilities. If you're a customer such as a school board, with facilities across six or seven utilities, it's pretty impossible to obtain the data in a standardized, transparent format to manage your portfolio. These are real challenges for real customers.

I'd now like to introduce an initiative that we've been spearheading since inception and that came as part of the data transparency in the call to action from the U.S., and that's Green Button.

Green Button is a standard based on a common technical standard called Energy Services Provider Interface. It is a collection of existing proven standards and it's capable of supporting any time series data, energy data, and any attributes of that data, including real time data. We talked about thermostats and how customer behaviours are changing. Green Button is capable of storing the data.

The most important thing is that it puts customers in the driver's seat. As a customer, if you had the ability to leverage this data with an easy process and authorize in anonymous ways anybody to leverage and provide value, you would do so. With what I call the Green Button initiative, customers are able to leverage a simple authorization process and view their data, which allows them to save on time and cost while helping to save the environment.

To bring you back a little bit to what we've done in Ontario, we have successfully implemented pilot programs, we have delivered a cost-benefit analysis for implementation of the Green Button platforms as the standard across the whole province, and we currently have a proposal pending for province-wide implementation of Green Button.

Furthermore, I'd like to say that at London Hydro we've been spearheading the development of a platform that allows us to share what we have among utilities so that they can collaborate and share the resources, because we do share customers at the end of the day.

In closing, we see Green Button as an enabler and an innovation catalyst that creates the foundation for an open data economy in the energy space. We believe greater benefits can be achieved if everybody adopts the standard nationally for all types of energy data.

I'd like to tie this up by saying that Green Button offers the opportunity to put Canada back on the map of leaders in data transparency.

Thank you.

● (0915)

The Chair: Thank you very much, all of you, for your presentations.

Mr. Tan, are you going to start us off?

Mr. Geng Tan (Don Valley North, Lib.): Thank you, Chair, and thank you to the witnesses for being with us today.

My first question is for IEEE, since you are here.

IEEE provides scientific and engineering information on the data field. This field has become very fast-paced and is ever-changing, which means that technology has to be updated or developed very quickly in AI or other areas.

You mentioned in your statement the importance of data, data access, and data transparency, but what I'm asking about here is the pace—the real time, let's call it. With this field changing so quickly, how does IEEE fulfill the role of providing up-to-date technology or scientific information to your members? What's your strategy to ensure that your data or technical information remains current and up to date? Maybe we can learn from some of your experiences.

Ms. Maike Luiken: First of all, we speak for IEEE Canada, not necessarily for IEEE. I technically could, because I'm a board member of IEEE, but I just want to be proper about this.

We stay current in terms of knowledge through the ongoing publishing business, through the publishing process. IEEE's data, let's say in the data port, can only be as current as the data that is provided by those who work with us. What we can do is essentially form new committees, new ad hoc committees, about future direction.

For example, we have a brain initiative. We have an initiative on smart communities, on the north with the Arctic communities, and on the environmental impact of technology deployment. I don't think I have all the committee names correct right now, but there are some 10 different initiatives working on future directions. Those eventually, if they prove required and necessary and they gain momentum, turn into new societies or new permanent committees at the IEEE level. They work across the different countries, so they are not country- or region-bound.

Does that answer your question?

● (0920)

Mr. Geng Tan: Yes, I think so. From your answer, your institute is always beyond or in front of technology development. You foresee the trends or tendencies of new technology.

Ms. Maike Luiken: We give our members an opportunity to come to the organization and say, "These are the items that need to be worked on. This is what we need to explore." That goes through a process to be evaluated by other members and to be looked at in order to determine whether we want to fund, essentially, activities in that area and explore it further.

For example, we have the Photonics Society, which of course did not exist 30 years ago. Electric vehicular technology has existed for a long time, but today it concentrates a lot on vehicular direct technology related to autonomous vehicles, communications in vehicles, and so on.

Mr. Geng Tan: Okay. Thank you.

I still have time, right?

The Chair: You have lots.

Mr. Geng Tan: Okay.

To Mr. Zindler, you're head of the Americas operations. Of course, your business covers Canada, as you mentioned in your statement.

Your company provided an independent analysis of the energy economy. How can your company contribute to the conversation in Canada on energy data and the future of the energy industry's strategy? Where do you get your Canadian energy data from? Is it from NRCan, or is Statistics Canada your only source of information in Canada?

You mentioned that you are not very satisfied with the quality of Canadian energy data, and that quite often the data is not very timely. If this is the case or the situation, what do you and your researchers do—I guess you have lots of analysts—when the submitted energy data is not reliably available?

Mr. Ethan Zindler: Thank you for the question.

Historically, my team has gone down and looked at provincial-level data disclosure. Some of the stuff at the provincial level is pretty good. In some provinces, it's good and in some provinces it's not as good. The format in which the data is produced is not always consistent. Sometimes it's literally in a PDF, or multiple PDFs, that you need to go through. Sometimes when you total up those numbers you get from the provinces, they don't necessarily match the numbers that are provided at the federal level. It's a lot of additional legwork.

I'll be candid. One analyst mentioned to me that once she has done all the big provinces, sometimes she feels like she won't put the extra effort in on the smaller ones, because the level of disclosure might be good or it might be bad, but it's just so much additional work.

It is challenging. The data can be collected. As the other folks who testified mentioned, there are some datasets that simply don't exist, that are more on the micro level about levels of household consumption or regional consumption of electricity, all of which we're very interested in. I should have put that in the context of the fact that we've seen, as you mentioned, a tremendous amount of progress and change in energy technologies over the last 10 years. We expect a lot more to come, but to understand where and how you deploy those technologies, you need to have a better understanding at a fairly micro level of how energy is being used and consumed. I think we feel there could be real improvement in that area.

● (0925)

Mr. Geng Tan: Thank you.

The Chair: Mr. Schmale is next.

Mr. Jamie Schmale (Haliburton—Kawartha Lakes—Brock, CPC): Thank you, Chair. Thank you, witnesses, for appearing today. Your very informative presentations are greatly appreciated.

I might as well start with Mr. Zindler, because I guess we're on a roll with him anyway.

As we go through the study, I have my suspicions where we might go with this, or where the government is headed.

I want to talk more about the set-up of the EIA. You mentioned that it was just plainly a data collection agency and had no regulatory power and that type of thing. Maybe you can expand upon that a bit more and tell us how the agency, to the best of your knowledge, functions separately from the government, or from the legislature as well.

Mr. Ethan Zindler: [*Inaudible—Editor*] the folks at the EIA directly as well. We know them well here in D.C. We actually provide some of our data to them, and of course we consume a lot of their data.

The EIA is literally in the U.S. Department of Energy building, but it is essentially its own independent office. It has its own funding and operates with the one and only goal of collecting data and providing forecasts. I wholeheartedly think that in data collection and provision, they do an outstanding job.

Frankly, with some others, I probably share some.... I've had my complaints about their forecasts, and I would not necessarily wholeheartedly endorse this model of an agency to do forecasting in Canada, but in collecting and providing data, they have a really important role. They've done a wonderful job of building a website that is pretty easy to use. The datasets can easily be downloaded into Excel and processed without paying for it in any way or without any kind of a firewall.

The data they provide really depends on the dataset. In some cases, it's monthly data. In some cases, it's annual. It includes natural gas storage levels, which are figures that can literally drive activity in the market every single week. There is import and export data on oil and gas, of course. On the electricity side, we find the plant-level data extremely useful in terms of their tracking literally every power plant in the U.S.

They have also really upped their game when it comes to trying to understand the level of generation now coming from photovoltaics on individual residential homes. That's actually becoming a bigger deal. It's obviously a very small percentage—I think way less than 1% of our power in the U.S. comes from rooftop solar—but it's growing. It has real implications, as one of your other witnesses would probably attest, for how we think about local utilities and how they interact.

Anyway, that's their general set-up. As I say, it's set up autonomously to some large degree, although I do believe the President appoints the head of the EIA. The person who has been the head of the EIA typically now is a non-partisan, academic type, and not somebody who brings to the job a real axe to grind on energy issues, necessarily.

Mr. Jamie Schmale: For the most part, that information is mainly collected at the EIA and the analysis done elsewhere, at a third party or an outside agency, correct?

Mr. Ethan Zindler: The EIA collect the data, and then they in turn do some analysis themselves.

Mr. Jamie Schmale: You said sometimes it's not reliable. Is that correct?

Mr. Ethan Zindler: I would say they do their own analysis of the data on a current basis, which I think is outstanding. The only time I would ever really take major issue with the EIA is when they do long-term forecasting, because that actually goes beyond the realm of data collection and into the realm of trying to predict the future. Of course, we all know that is impossible, but we do it all the time.

● (0930)

Mr. Jamie Schmale: Thank you very much.

Ms. Luiken, in your presentation you mentioned security and using that information for a wide variety of sources, but also keeping it secure. How do you see that being a challenge, based on the fact that we've had security breaches at the Pentagon, the CIA, and so on. How do we do that? What recommendations do you have?

Ms. Maike Luiken: To be quite honest with you, I think it's going to be an ongoing race. There is no silver bullet. Technology is evolving, and whatever we build, somebody can break. There is no unified answer. We just have to keep on working on different technologies and different ways to keep data secure.

It's really serious, because in the case of cybersecurity, for example, we could have a breach in the communications in a power system that would bring down, say, the electrical power supply to Toronto and cut it off for a while. Depending on how long it was off, it could be catastrophic. Cybersecurity, data collection on cybersecurity, and the various ways we can monitor what is happening are essential as part of the data collection around energy systems in general.

Mr. Jamie Schmale: Do you have any recommendations for us at all that we can put into this report, or anything you would like to see?

Ms. Maike Luiken: I could go back to our experts in that area, if you wish, and ask them to provide a brief. I think I would have to go back and get particular recommendations for you, and they change from month to month.

Mr. Jamie Schmale: Yes, you are correct. It changes very quickly. I'm just curious.

Ms. Maike Luiken: There are a whole bunch of recommendations in terms of how to handle data, VPNs, and so on and so forth, on how to protect it in the first place, how to anonymize it properly, and so on. I think, though, that if you want recommendations on a month-to-month basis on what is going on, then we'd have to look at experts in that area and get those services supplied.

Mr. Jamie Schmale: We've heard multiple times—

The Chair: I'm going to have to stop you there. I hate doing it, but maybe Mr. Cannings can pick up where you left off.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): I'm going to start with Mr. Zindler and get back to this analysis-modelling-forecasting question.

It seems a part of the reason—indeed, the major reason—for us to create a better energy information system in Canada would be to have all the data in one place. All the data would be consistent, and we could pool all the data from the provinces so that people like you and others wouldn't have to go through the headache of trying to stitch it together.

There's also the question of having a one-stop shop that is non-partisan and independent. I'm wondering how far you would go in terms of that analysis. You say the EIA does some analysis, but you don't consider its forecasts to be reliable. I'm wondering if there's any role for an agency such as this to do forecasts, if they provide various scenarios. You know the devil in those modellings is all the assumptions you put into them; some people will assume this and that, depending on what they want the forecast to look like.

I'm wondering if there's any role for an agency like that to say that if we believe this, then such-and-such will be the outcome. How far down that analysis road would you see a good agency going?

Mr. Ethan Zindler: That's a good question. I'm somewhat ambivalent about the idea of the government doing its own long-term projections about what the energy sector will look like.

You're exactly right that the good forecasts, EIA's included, provide high, low, and middle scenarios. I think that's very useful, but it is an open question whether it is government's role to forecast on what essentially is mostly a highly regulated but private sector and how it will evolve over the future. I don't know that we do that elsewhere. For instance, government doesn't necessarily try to forecast what exactly the health care industry or the information technology industry will look like in 10 years. I get that energy is in the national interest, and that's why this has probably existed over time, but I think the challenges with central government forecasts is that they become benchmarks.

I speak to this from historical context. Our firm got its start doing research in renewables. Ten years ago, if you looked at the standard forecasts from the EIA, from the IEA, and from many other big authorities in this area, they did not predict even close to the level of growth in development that we've seen in these technologies, and for a number of years that allowed various incumbent players to say these technologies are never going to be viable because the EIA says they are not going to be viable. I'm not convinced that having government provide that kind of benchmark for the future is necessarily the right role for these types of agencies.

That said, collecting data is extraordinarily important, and the analysis of that data, which EIA also does, is extremely important as well, and they do it extraordinarily well.

They got the forecast wrong, but we also got the forecast wrong. Everybody got the forecast wrong. That's inevitable. My issue is whether or not there should be an official government-sanctioned view of the future of the energy industry. I'm not convinced that's the right role for government.

● (0935)

Mr. Richard Cannings: One of the problems is having a dataset or some projection that the public at large can trust when it comes to projections. The oil industry might project that this is what the world oil demand will be 10, 20, or 30 years out; then the solar industry says no, it's going to look like this.

I can see the utility of having a neutral, middle-ground player providing some scenarios and people choosing whichever one they want to believe, but it would be something the public could get behind. They could see one industry predicting one thing and another industry predicting something else. As you say, everybody picks the one they want.

Is there any way we could have a neutral analysis of those kinds of questions? Also, how useful is it? Is it useful to go beyond 10 years in this day and age? We see energy demand in different sectors projected out to 2050 now. To me, who knows?

Continue your comments.

Mr. Ethan Zindler: I think that's a fair point. Frankly, we also do forecasts out to 2050, and I'm sure we're going to be wrong, just like everybody else. I gave us as one example, but our competitors are in the same situation. There are research firms that are trying to think about this in the long term and provide their own views. As you point out, the major oil companies, the solar industries, and others will do that as well. I think the public can combine them.

The concern I have over government forecasts is that your view of the future can be shaded by your view of the present. If you have a particular partisan leaning or view about one particular technology that is shaded by whatever your partisan backing is, that can shade your view of the future.

Again, in the U.S. the accusation against the EIA was that they were too conservative because they were too much in the pockets of the existing energy industry and not forward-looking enough. Frankly, I don't know that was an entirely fair accusation, but I think it's challenging to have government benchmarking the future and I don't know that doing so is a role for government.

● (0940)

Mr. Richard Cannings: Okay, I'll just then—

The Chair: I'm going to have to stop you there, Mr. Cannings, unfortunately. Time flies.

Mr. Richard Cannings: Okay. I had so much more.

The Chair: We have about three minutes left.

Ms. Ng, I think you're going to take it.

Ms. Mary Ng (Markham—Thornhill, Lib.): Thank you so much. I will try to be succinct here.

On the big dataset that you were talking about, as this committee is thinking about a data strategy, can you talk a little more about that? How might that actually integrate or be helpful in whatever it is that might get put together by way of doing a better job at getting data?

Ms. Maike Luiken: One of the things we want to avoid is collecting data differently, because we have lots of systems in place.

Ms. Mary Ng: Right.

Ms. Maike Luiken: What we need is an interface to be able to integrate data for various reasons—various levels of security, etc. The Green Button standard that was talked about is one of them. You can actually look at the data from different sources through, say, a consistent dashboard. Depending on what level of data we are talking about, if it's totally anonymized, then we can export that dataset into a neutral location, and researchers from all over the world potentially could use it.

Ms. Mary Ng: Are you saying, then, that those datasets exist now and could be fairly readily...? If Stats Canada, for example, wanted to find an interface to those big datasets, what's the state of readiness around them?

Ms. Maike Luiken: The readiness is that the system exists, but consistent data across Canada doesn't exist yet. However, this interface, this schema, that Green Button standard—that exists. As more utilities come on—and it could go to water, it could go to gas, it could encompass all of the different energy uses and other different data that can be connected through the schema, through the standard —then it would be a general interface.

The point is to make the datasets available for different analytics and different forecasts. One of the reasons forecasts look different and simulations look different from different sources is that the limits are drawn in a different way. For example, if I make energy forecasts to 2050 in Canada and I had all the data available that we could possibly get and I make assumptions about population growth this way and weather that way, and you do the same thing, but your assumptions on immigration are different from mine or you don't take immigration into account and assume a steady population, of course our forecasts are going to look different. It depends on what boundaries we draw on the different inputs. If one of us uses different or additional variables, the forecast changes. It's not necessarily the bias of the owner of the projection; it is what the boundary on the data input is—

Ms. Mary Ng: Right. Okay, that then enables the analysis.

Ms. Maike Luiken: —and then the assumptions that go along with it. People need to be able to play with that and then make a judgment call, saying they trust this projection better than this one. That's where your judgment call comes in.

Ms. Mary Ng: Mr. Stojanovic, you talked about the data that is being collected through the Green Button initiative. Of course, what we're trying to do here is understand how we can have data that will help Canadians make choices about consumption and about usage and how they might be able to make decisions that may therefore then affect the price of their consumption.

You said that Green Button is scalable. It's scalable through the provinces and across the country. Does it fit into the big datasets that Ms. Luiken was talking about? Then a national energy agency, or whatever, might therefore be able to work with it in an outcomes kind of way, which is understanding production but giving consumers the ability to understand usage and make decisions that then ultimately help our climate goals.

● (0945)

Mr. Zoran Stojanovic: Those are great points. I want to also add a comment to your previous question.

Data does exist in various formats, and it's not utilized. What's missing is the infrastructure. Going back, we talked about Wi-Fi. We see the Green Button as the standard for Wi-Fi for energy data. We know the data exists, but the ability to authorize it and then make it available, anonymized, and secure—we talked about security—is where the problem is.

Going back, yes, the answer is that the Green Button standard is scalable. It does not all have to be centralized. Utilities hold the data; we just have to enable them to turn that Wi-Fi into energy data so that anybody can use it.

Ms. Mary Ng: When you say "enable", is that in terms of legislation, or in terms of policy? What does "enabling" mean?

Mr. Zoran Stojanovic: Enabling is twofold. One is the direction. It could come from the government, such as the mandate that's potentially being proposed. It gives utilities a framework they can work against and they can all follow and speak the same energy language.

The second one is providing the guidance for utilities on the framework boundaries in terms of what those datasets are, what we need to store, and making it scalable, making it future-proof. Going forward, we don't know what datasets we're going to need 20 years from now, but the correct framework and schema for the data would allow us to do that, similar to what I mentioned about Wi-Fi.

Ms. Mary Ng: Okay. Thank you so much.

Thank you, Chair.

The Chair: Unfortunately, that's all the time we have this morning, but we're very grateful to you for coming in. I hope your first experience was a good one.

Mr. Zindler, we'll be rooting for the Caps. We hope they win tonight.

Thanks for joining us.

● _____ (Pause) _____

●

● (0950)

The Chair: We are going to resume the meeting. Thank you, everybody, for your patience.

In our second hour, we have Statistics Canada. Thank you for joining us, Mr. Greg Peterson and Mr. René Beaudoin. We appreciate your being here.

As well, from the Department of Environment and Climate Change, we have Dominique Blain, Derek Hermanutz, and Jacqueline Gonçalves. Thank you all for joining us.

You know the process. I won't take time to explain it, because we're running a bit behind.

Why don't we start with Mr. Peterson?

Mr. Greg Peterson (Director General, Agriculture, Energy, Environment and Transportation Statistics, Statistics Canada): Thank you, Mr. Chair. I appreciate the opportunity to return to the committee.

I've been following with interest the testimony that has been given so far. I'd like to give a few very brief opening remarks.

I'd like to focus on the role that Statistics Canada, which is currently celebrating its 100th anniversary, plays in the national statistical system.

First, the Statistics Act specifically defers independent decisions of statistical methodology, communications, and operations to the chief statistician—that is to say, the agency. This independence means that we're not beholden to any particular constituency, and we believe this gives us credibility.

Another contributor to this credibility is the transparency under which we operate. We are transparent by sharing with the public our processes, our methods, and our data sources. Also, the work we do is guided by international standards.

Indeed, Statistics Canada has played a lead role in the creation of a number of standards, such as the UN's *Energy Statistics Compilers Manual*, the *International Recommendations on Energy Statistics*, and the UN System of Environmental-Economic Accounting. Having been a trusted source of information on Canada's economy, society, and environment for 100 years means that we are approaching emergent needs from a position of strength.

The second point I would like to make is that we recognize that we have to do better. As I mentioned the last time I was here, Statistics Canada is taking the opportunity now to lay the foundation for a more data-driven future. Driving this push to modernize is the understanding that we have to be more timely, we have to be more responsive, and we have to be able to produce more information at more granular levels. Our efforts thus far are starting to yield some positive results.

The answer is not necessarily in launching new surveys. Canadians have already paid their governments to acquire energy information, often for regulatory or administrative purposes. Also, there is a growing wealth of sensor and earth observation data that's collected by both public and private sectors. There is tremendous opportunity in better integrating existing data to provide value-added output, not just as information on energy production, distribution, and use, but also as linkages between energy and the environment, labour markets, and innovation.

We believe Statistics Canada is uniquely positioned to support this integration, not just as a holder of petabytes of data on the Canadian economy, society, and the environment, but also as a trusted custodian of data that understands issues of privacy, confidentiality, access, and information management. We already have a legislative and policy framework to make this work. This approach is not hypothetical but is happening in real time.

In the past year, we have supported the horizontal review of innovation and clean technology undertaken by the Treasury Board Secretariat. In this project, we integrated 10 years of program data from more than 90 programs across 24 different federal government departments, agencies, and crown corporations. We integrated this data into our existing data holdings, and with this linked dataset we can look at outcomes associated with these programs, kind of at a firm level, roll it up, and take a look at impacts.

On the data dissemination side, we are bringing greater insights on the complex and interrelated nature of social, environmental, and economic factors in the development of subject-specific information hubs. We kicked this off with the development of a Canada and the World statistics hub. We've continued this initiative with statistical hubs on cannabis, transportation, and the sustainable development goals, and we can do the same for energy.

Those are a few opening remarks. I'm going to close here.

In closing, I would like to reiterate that the world of data is rapidly evolving. Given the amount of data out there and the increasing number of players, the idea that there can be a single organization that can do all is probably a throwback to a bygone time.

Moving ahead, we have to keep in mind not only the state of play today but where we're going to be in the years ahead. Making advances in this context means partnering with others. It means creating platforms where information can be integrated and shared. It means using the strengths that each player in the information ecosystem provides.

Those are my comments. Thanks.

● (0955)

The Chair: Thank you very much.

Go ahead, Ms. Gonçalves.

Ms. Jacqueline Gonçalves (Director General, Science and Risk Assessment, Department of the Environment): We did not prepare opening remarks this time because we did the last time, so we're happy to take questions.

The Chair: All right. Let's jump right in then. That's a good precedent to set.

Mr. Serré, I think you're going to start us off.

[*Translation*]

Mr. Marc Serré (Nickel Belt, Lib.): Thank you, Mr. Chair.

I thank the witnesses for having come to meet with us this morning.

My first question is for the Statistics Canada representatives.

Several witnesses have said that data is not up to date, and sometimes goes back several years. At the Standing Committee on the Status of Women, Statistics Canada officials made a presentation that was based on statistics from the 2013 General Social Survey. The next General Social Survey will be carried out in 2020. So we are looking at a seven-year gap between the two.

You say that you don't necessarily have to carry out more surveys, but I would like to know how you would go about gathering more data if additional resources were allocated to Statistics Canada.

[*English*]

Mr. Greg Peterson: The issues concerning timeliness are really good ones. In many ways, if we take a traditional survey-based approach, we're really constrained by the ability of our respondents to provide us with the information in a timely manner. For instance, if I take a look at our sub-annual statistics on energy, I see that we obtained information from provincial authorities in order to reduce response burden. In some cases, provincial authorities won't allow us to release data until they've released data on their jurisdiction themselves. In other cases, we're waiting some time in order to have data released.

I think we have to continually take a look at the different ways we approach data. In the agriculture space, we're currently working on a pilot project with Agriculture and Agri-Food, the Alberta Ministry of Agriculture and Forestry, and the provincial body that deals with crop insurance. In that project, we're starting small. We're attempting to take a look at whether or not we can combine data from all of these sources and model crop yield data on a weekly basis that would be available a day or two after the end of the reference week. I think that's the type of environment that we need to go into, and for sure, we're not there yet.

[*Translation*]

Mr. Marc Serré: We have heard several witnesses say that there aren't many statistics or much data on renewable energies or the biomass.

My question could be for either organization.

Do you have any projects with a view to gathering more information in those two areas?

Ms. Jacqueline Gonçalves: I can tell you about what we are planning. That is certainly a priority for us, given the changes in the economy. This is one of the priorities we are working on with Statistics Canada. We can provide additional detail in writing, if you wish.

[*English*]

Mr. René Beaudoin (Assistant Director, Environment, Energy and Transportation Statistics Division, Statistics Canada): If I may comment, we are working together and adding this new function. Biomass is one example. There is biofuel as well. On renewables, we are working right now to catch up. It's part of quality. We are staying relevant. This domain evolves all the time.

As the subject becomes of more interest, we need to pick up. A few years back, wind and solar were not really there, so we asked ourselves, "Do we invest in getting the first solar panel so that we see the growth, or do we wait to have models in order to be ready?" Now we're catching up on a lot of things. A lot of our technology is allowing us to be faster now.

I have one small note on timeliness. I know you brought examples of data that took longer to release. We have a vast amount of data that is still generated very fast, according to international standards.

We have a lot of monthly surveys. Most of them come out within two months of the reference month, and some of them are 23 days afterward. It's very fast for IEA reporting on petroleum products. In annual reports, for RESD, the report on energy supply and demand, we increased our timeliness by six to eight weeks last year.

Again, it would depend on the respondent, but we are making headway on improving timeliness as well.

● (1000)

Mr. Marc Serré: We've heard from many witnesses about the need for a national energy centre, something similar to what they have in the United States. Obviously there's a lot of money attached to it, so it's a big government decision to be making, but if we were looking at trying to enhance the existing Statistics Canada situation or the existing areas here, what recommendations would you have for us as a committee?

You mentioned challenges with the provinces and some of the timeliness of releasing data. Do you have any specific recommendations, either of you, on what we could do in this area? I don't necessarily mean trying to establish another centre, but to work more collaboratively within the provinces, municipalities, and first nations, and still have Statistics Canada play a leadership role. Have there been any recommendations submitted?

Mr. Greg Peterson: Maybe I can unparcel that question into a few components.

To provide some context, I know from previous testimony that the recommendation has been to create an EIA type of institution here in Canada. Just to be clear, my understanding is that the budget for the EIA in its 2017 fiscal year was $122 million U.S. By contrast, the energy statistics budget within Statistics Canada is $4.6 million. To be fair, we're comparing apples and oranges, because we don't do forecasting and we have an existing statistical infrastructure that we can leverage in order to do our work, but there's an order of magnitude of difference there.

We already have the instruments in place to share data with provinces. Sections 11 and 12 of the Statistics Act give us the authority to share data with statistical focal points or with other provincial organizations, and we do with almost all provinces. Section 13 of our act gives us the authority to acquire administrative data from any level of government and any organization, and we exercise that as well, so there is already data moving between jurisdictions.

What we don't have, which we have in other subject matter areas, is the same types of consultative bodies that we may have in other areas. For instance, we have an agricultural statistics advisory committee that includes experts from the field. We have a federal-provincial-territorial committee on agricultural statistics as well, and we work closely with the provinces through that vehicle.

Mr. Marc Serré: How much time do I have, Mr. Chair?

The Chair: You have none.

Mr. Ted Falk (Provencher, CPC): I'm going to start with Statistics Canada. I didn't quite get you the last time you were here.

I appreciate the work you do. Thank you very much.

Thank you to all of our witnesses for coming to committee again. We appreciate your presentations.

In your comments you said you are laying the foundation to become more timely and more responsive, so how about more accessible?

Mr. Greg Peterson: Accessibility is a good point. We already make our estimates really available through CANSIM. We are making moves to make microdata more accessible. We already have a series of research data centres across the country that house social data, and we're working on making business data available through these centres as well. We're also attempting to move in the direction of providing secure remote access to qualified researchers.

Mr. Ted Falk: You mentioned that there have been a lot of comparisons between your organization and the Energy Information Administration in the U.S. I believe their information is much more accessible to stakeholders than perhaps Statistics Canada information would be.

Are you familiar with accessibility between your two organizations?

● (1005)

Mr. Greg Peterson: Do you mean in terms of quality of the website?

Mr. Ted Falk: No, I mean just for acquiring statistical data.

Mr. Greg Peterson: My understanding, from the witnesses I've been following, is that the benefit of the EIA is accessibility to a range of information through a single point of access. We don't have that single point of access. We have various players that are producing very specific information.

In terms of accessibility to microdata itself, we do have tools and vehicles in place that allow people to have access to data.

Mr. Ted Falk: Some of our previous presenters at committee indicated that your data is becoming more timely, within the three-month period that they would like to see it, as per my historical perspective, or within three months from the data point.

We've also heard presentations about real-time data. Is your organization prepared and able to accept real-time data and to report on it?

Mr. Greg Peterson: I think that is the direction in which official statistics have to go, period. If you talk to anybody from a national statistical office around the world, I think they would give you the same answer.

For instance, if I wanted the most timely available information on the U.S. strategic petroleum reserve, the EIA does not produce the most timely estimate. The most timely estimate comes out of a private sector outfit called, I think, Orbital Insight, which models the petroleum reserve based on the interpretation of good-quality resolution satellite data.

That's the direction in which we are trying to go. In our agricultural statistics program, for instance, we produce a weekly crop conditions assessment program based on coarse-resolution satellite data, from which we have estimates available a day or so after the end of the reference week. There's no question that's the direction that we need to go.

Mr. Ted Falk: As an organization, you also carry a very big stick in compelling organizations to provide information. Do you exercise that authority regularly?

Mr. Greg Peterson: We tend to work co-operatively with our respondents. To my knowledge, on the energy side, we've never had to exercise the stick.

Mr. Ted Falk: I know that as a small business owner it seems that we're always getting Statistics Canada requests, and somebody has to burn up some time completing them. They're a pain in the butt. I understand the necessity for them, but it's just that if there are ways that your organization can make them more efficient or...?

Mr. Greg Peterson: I really appreciate that comment. That reflects the direction in which I think official statistics have to go, such that doing surveys becomes an instrument of last resort. At our very first crack, we have to take a look at the existing administrative and other data that exist out there.

Mr. Ted Falk: That's right. In my industry, for example, we're providing data on all kinds of different measurements. I'm in the aggregate industry in one of my businesses, so we provide information by the cubic metre to some government jurisdictions. Others want it by the tonne, still others by the imperial ton, and then others by the cubic yard. There's a real mismatch. If I could encourage you to work with other jurisdictions to standardize reporting of units of measurement, not only in my industry but in all industries, that would be very helpful.

Mr. Greg Peterson: If I can pile on that comment for a second, this again goes to the importance of taking advantage of every player within an information ecosystem. In the telecommunications space, we work closely with the CRTC so that only a single instrument goes out to broadcasters and telecommunications companies. That contains information that they're after and information that we're after, so we're only hitting on somebody once. We're sharing the data and collaborating on ensuring that what we're releasing is going out. There are models of doing this.

Mr. Ted Falk: That's good.

I'll go to the environment department. I think the last time you were here, we talked about how you calculate greenhouse gas emissions or carbon emissions. I asked whether you considered the various emission standards in production vehicles, including off-road equipment, which I'm very familiar with, when you do your calculations. Can you expand on that a bit?

Ms. Dominique Blain (Director, Pollutant Inventories and Reporting, Department of the Environment): Good morning.

The short answer to this question is that we do. We have a detailed database of both off-road equipment and on-road vehicles that we use to analyze the entire fleet of vehicles and equipment in Canada. We update that database annually.

We use it as a bottom-up tool to estimate the fuel combustion by different categories of vehicles based on years, on vintages. We acquire vehicle identification numbers from provinces and update them annually so that we have a good representation of what the Canadian fleet is made up of in regard to types of vehicles and how that evolves over time. That enables us to use more effectively the information on fuel consumption and attribute it to the different categories of vehicles.

● (1010)

Mr. Ted Falk: Good. I appreciate hearing that.

Have you been asked to provide any data to the Minister of Environment on how much this carbon tax they're proposing will actually reduce emissions? Have you done any of those calculations?

Mr. Derek Hermanutz (Director General, Economic Analysis Directorate, Strategic Policy Branch, Department of the Environment): I think I mentioned the last time we were here that the government would be releasing a report with that information. That report has been shared with the chair of the committee. The analysis shows that under the existing provincial programs, along with an assumption that the provinces that don't have a program in place will use the federal backstop, it will lead to an estimated 80 to 90 megatonnes of reductions.

The Chair: Thank you.

We'll go over to you, Mr. Cannings.

Mr. Richard Cannings: Thank you all for coming back here.

I'll start with StatsCan and talk about the big picture in terms of what I think we're trying to get a handle on in this study: what a new energy information system, or whatever you would call it in Canada.... I don't want to call it an agency, an administration, or anything like that, because I don't want to design it. However, it's clear that we need some sort of coordination across federal government departments, provinces, and the private sector with some sort of agency or group that will set standards, have the muscle to promote timeliness, and then produce an access point where people can relatively easily access the important bits of information.

I know I've floated the idea of some sort of secretariat that would be kind of at arm's length, and other witnesses have downplayed that, thinking that it wouldn't be independent enough.

I'm just wondering if perhaps you could both comment on what kind of federal-provincial arrangements—let's start there—would have to be put in place to get that on the road. We have federal-provincial agreements on all sorts of things, as I think you mentioned, with regard to statistics. However, if we could get something like that going, I think we'd be on the road. Could you just comment on what we would need to do in that agreement, and on how possible it is in the short term? That's a small question.

Mr. Greg Peterson: A small question.... Let me try to answer.

I'm most qualified to answer that question from the perspective of the environment that I'm working in. In the environment that I'm working in, we already have a legislated ability to share information —to have both incoming and outgoing sharing of information—with the provinces.

From the point of view of Statistics Canada, we have a federal-provincial-territorial consultative council on statistics, with representation from all the provinces and territories, that deals with the coordination of statistical matters. In addition to that, we have a number of federal-provincial-territorial tables dealing with specific subject matter areas.

The degree of coordination, governance, or control really varies from subject matter area to subject matter area. In the case of agriculture statistics, it's a relatively informal group. Well, it's formal enough that we meet, have agendas, and keep minutes, but there is no formal governance over the statistical system itself.

By contrast, where we're dealing with areas of stronger provincial jurisdiction, such as education or justice, I believe that in the case of justice, we have meetings at the deputy minister level to coordinate the justice statistics program.

In any case, the mechanism is in place in order to make this happen in the statistical world.

● (1015)

Ms. Jacqueline Gonçalves: From a technical data-gathering perspective, we have, over the last couple of years, been reinforcing our relationships with the provinces and territories. Policy work around the pan-Canadian framework has driven a lot of discussion on how we can better harmonize nationally with regard to gathering data and identifying strengths and weaknesses in terms of our methods, and with regard to sharing information.

At the moment, we're working within the framework of the Council of Ministers of the Environment and the technical working groups underneath that body to work through some of these issues. We certainly have noticed that the relationship is strengthening.

Mr. Richard Cannings: It strikes me that to get where we want to go, at a minimum we'd need some kind of office, or whatever you want to call it, that coordinates all this, that gets all the players in shape and has a set of rules that is agreed on by the provinces and the federal government, and hopefully some agreements with the private sector. Then it can enforce those and make sure that things are timely and consistent.

I'll move back to StatsCan. We had a witness from Bloomberg in the previous hour who had a healthy skepticism of forecasting and modelling. How much of that does StatsCan do? I know the NEB does it all the time to some level of success, or not. I just wonder how much you do, and what you might say about the usefulness of modelling 10, 20, or 30 years into the future.

Mr. Greg Peterson: We're willing to do any work that's consistent with our mandate and doesn't threaten the credibility of the organization. For instance, we'd feel uncomfortable if there was a risk of being perceived to influence our current estimates based on forecasts that we make of the data. We don't operate in that space.

That said, we already do some modelling and impact analysis. There are various programs within the agency that do that. If we were to do that in a case like this, we'd be after complete transparency, including being very clear in terms of our sources of data and assumptions that go into a model.

For instance, if you were to take a look at our cannabis portal, cannabis not yet being legal, there is still a requirement for us to identify what's going on out there, and we're attempting to model it on how it would fit into GDP. We've modelled our estimates of cannabis's contribution to GDP. We make this information publicly available and we make our assumptions publicly available, and on our information portal we, in fact, allow users to change the assumptions if they don't believe our assumptions, so that they can see how the estimates would change. That's the kind of transparency we're after.

Mr. Richard Cannings: In my perfect world, I'd like that kind of thing. I'd like to be able to move my assumptions around to see how that would affect the outcome. I should check to see what your cannabis GDP estimates are for my riding.

The Chair: Why don't we stop there?

Mr. Richard Cannings: I was just getting going.

The Chair: We'll stop on a high note and move over to Ms. Ng.

Ms. Ng, we're over to you.

Ms. Mary Ng: Thank you so very much for coming back. It was great for both organizations to set us on the course, and now that we've heard from many witnesses, we will do do some subsequent probing, if you will.

We've heard from a range of individuals. I would be interested in understanding something a bit better from Statistics Canada. There is the FPT relationship, but then you hear about the datasets that are gathered through utilities. Some of the utilities are within our jurisdiction, while others are private, etc., Then witnesses who came earlier, such as IEEE, talked to us about having a big dataset or datasets that are already being gathered and compiled for a whole range of other uses that could come into a use should the federal government want it or need it, but what they're looking for is that framework bridge, a set of standards by which the datasets can speak to one another.

Is that something you think Statistics Canada could do, or should be doing? They already probably do.

● (1020)

The Chair: Just let me interrupt. The bells are ringing. We need unanimous consent to continue if there's a desire to do so, or we could just finish the question and get the answer in.

Mr. Jamie Schmale: Can I move for unanimous consent to extend the meeting no more than 10 minutes to continue Mary's question and get our round in?

The Chair: We're at 28 minutes now. Is everybody agreeable to that?

Some hon. members: Agreed.

Mr. Jamie Schmale: It's for no more than 10 minutes.

Mr. Greg Peterson: I think what you've described is in essence the future of official statistics. I think that as an organization, we've come to the realization that we don't have to collect everything, we don't have to own everything, we don't have to be the custodian of everything, but if we can develop frameworks that allow us to better access information that's being held by others, maybe we can process what we need within their own environment and then bring that back into a secure environment in Statistics Canada for our purposes. That, in fact, is the direction we want to go towards.

Ms. Mary Ng: We talked about not having that advisory body that would have the various stakeholder interests to provide an input about the kinds of outputs that the statistics would need to be from a gathering standpoint and from a usage standpoint.

Can you talk a little bit about what that could look like as it relates to energy data and usage data that will be helpful on the environment side? I've certainly asked a lot of questions about how information is gathered and gets out there so that consumers are able to understand how their behaviour, their usage, and so forth will help us as a country to achieve our climate goals.

Maybe both of you could take a stab at that answer.

Mr. Greg Peterson: We've had advisory bodies that have worked really well in the case of the agriculture statistics committee, for instance. We draw constituents from industry associations, from academia. We have a separate table for provinces—they're not at that table but a separate table—and we also include AAFC. This body provides guidance to us in terms of how we can make improvements to our program. We've addressed issues such as accessibility and relevance of data, and we've addressed some issues of prioritization.

Ms. Mary Ng: Ms. Gonçalves or Mr. Hermanutz, would you comment?

Ms. Jacqueline Gonçalves: We currently have a number of bodies that help us gather feedback from stakeholders. CEPA has a national advisory committee that is composed of a variety of stakeholders, and we sometimes use it. We also often put out our products for public comment. We receive commentary and feedback through those processes. Certainly, working in collaboration with StatsCan, we can explore if there are other ways that we can enrich our mechanisms to get advice.

Ms. Mary Ng: That's in a future state. That's what we're hearing, right? You're doing one thing and another one is doing something else, so where's that opportunity so that it isn't the two of them and it really is a collaboration within a framework?

Would we agree that this is the future, and that's where it needs to go?

Ms. Jacqueline Gonçalves: Yes, in particular where our work overlaps. We are having those discussions now about what that could potentially look like in terms of governance.

The Chair: All right. Thank you very much.

Go ahead, Mr. Schmale.

Mr. Jamie Schmale: Mr. Hermanutz, thank you once again.

Out of curiosity, when you talked about the report that mentioned the potential reduction in GHGs as a result of the nationally imposed carbon tax, when was that study undertaken and when was it completed?

Mr. Derek Hermanutz: I don't recall the exact date that it was published, but the work that was done was based on ongoing work that the department does.

● (1025)

Mr. Jamie Schmale: When it was published and when it was completed could be two different things, potentially.

Mr. Derek Hermanutz: Yes.

Mr. Jamie Schmale: When was that study actually completed?

Mr. Derek Hermanutz: I don't have a precise date that I can give to you right now.

Mr. Jamie Schmale: Okay. We as the opposition were asking for quite some time for that information—

Mr. Derek Hermanutz: Right.

Mr. Jamie Schmale: —and it was never adequately provided to us. That's why I'm curious. We know when it was published; what I would like to know is when it was completed. That is very important for us.

Based on the information you have and the data that has come out, do you see Canada meeting its Paris targets?

Mr. Derek Hermanutz: Yes, we do.

Mr. Jamie Schmale: That's even though the reports that have come out from the UN say that Canada will not meet that without shutting down major sectors of its economy.

Mr. Derek Hermanutz: Our report, which is required to go to the UNFCCC every two years—it was released in December of last year—shows 232 megatonnes of progress since the previous report two years ago. It shows the policy measures that have been announced that comprise that 232 megatonnes. It identifies an additional 66 megatonnes for which measures are under development, but we don't have enough information to properly model that yet. Then that shows the distance from the previous BR, the biennial report, to the Paris target in 2030.

Mr. Jamie Schmale: Is that based on the current forecast with the $50-a-tonne carbon tax? Is that not increasing? We had a report from, I believe, Environment Canada, that said in order to hit these targets, you had to increase the carbon tax up to $200.

Mr. Derek Hermanutz: That's not in our projections. Our projections only take into account policies that are currently legislated or funded or in place.

Mr. Jamie Schmale: How are these two so far off?

Mr. Derek Hermanutz: Sorry?

Mr. Jamie Schmale: How can Environment Canada say one thing and...? The UN says we're going to miss our targets, but you're saying we're on target.

I'm just curious how—

Mr. Derek Hermanutz: I'm not familiar with the $200 number. I don't think that came from our department.

Mr. Jamie Schmale: I believe it was Environment Canada, if memory serves.

Mr. Derek Hermanutz: I'd have to follow up on that. That's not in a published document that we have.

Mr. Jamie Schmale: Okay.

Mr. Derek Hermanutz: Estimates that other parties do are out there. That's not underlying our projections of how we're going to meet the Paris target.

Mr. Jamie Schmale: I'll have to show you that report.

Mr. Derek Hermanutz: Okay.

Mr. Jamie Schmale: I don't have it here.

The Chair: We have to stop there.

Thank you very much, all of you, for joining us today. Sorry for the short time frame.

The meeting is adjourned.

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